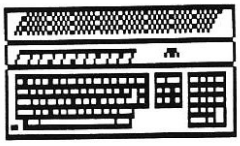
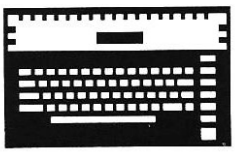
XIO3



Jan./Feb. 1994



A Newsletter produced by the Garden City Atari Computer Enthusiasts, 1003 Amphion St, Victoria, B.C. CANADA V8S 4G2

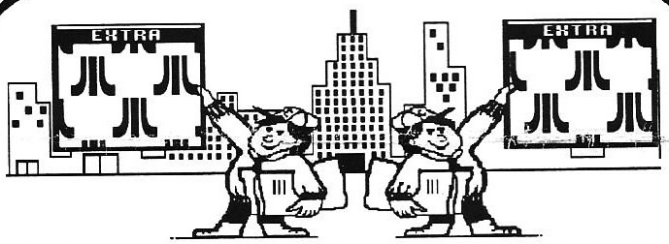
NOTICE!!!

ANNUAL GENERAL MEETING

January 20, 1993

Saanich/Victoria Public Library

Starts 7:00



ST/8-bit Social S.I.G.

February 6, 1994

George Rose's Place

7972 Galbraith Cres., Saanichton

NOON - 4pm

for directions, phone George at

652-0572

G.C.A.C.E. EXECUTIVE

President: Gordon Hooper
Vice President: John Picken
Secretary: Rowland Grant
Treasurer: John Towler
Editor: Chris Sherwood
ST librarian: Ted Skrecky
8-bit Librarian: George Rose
BBS Sysop: Bob Nex
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CREDITS

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MEMBERSHIP

Membership dues are $25.00 per year for family memberships. Membership includes a subscription to the club newlsetter, XIO3, access to over 300 8-bit and 100+ ST disks, and if you are into telecommunications, increased time and upload/download ratio on the official club BBS, the Pothole BBS, (604) 642-6795, 3-2400 bps, 24 hours, 7 days.

MEETINGS

Meetings are held on the third Thursday of each month except December at the Saanich/Victoria Branch of the Victoria Public Library. Meetings start at 7 pm and usually run until about 9 pm. Copying of club disks, both 8-bit and ST usually takes place at meetings, unless the librarians cannot make it with their machines.

ADVERTISING IN XIO3

Members can place classified ads (ie: Buy, Sell, Swap) for computer related products free of charge.

Commercial advertisments must be submitted as camera-ready artwork and be pre-sized. Please mail the artwork along with payment in full to Garden City A.C.E. care of the editor. Newsletters are published in January, March, May, July, September and November. The deadline for submissions is the 10th of the month in which the newsletter is being published.

The rates for commercial ads are as follows: Full page - $15.00. Half Page - $8.00, Quarter Page - $5.00, Business Card - $3.00. Please call the Editor for additional information.

Peeking Around

by Gordon Hooper

The cartoon at the head of this column is GORD's philosophy of life, as expressed by Calvin. Hobbes appears to disagree with us ... Welcome to new members ELIANE HAMEL, MICHAEL DAVIES and BRYAN TESKEY, who is a corresponding member from Port Alberni. Welcome back to renewing members DAN FERGUSON, DOUG SKRECKY, DARYL TAYLOR (I won't mention a small lapse he had that ended up with him having a new 486), MARK ERICKSON and RON THIBODEAU. ARNOLD NAPP, who we haven't seen at a meeting for a while because he's been in Estonia, also renewed. Welcome back. Even I let some moths out of my wallet when I opened it to renew ... Hi to ED HALL in Whitehorse. The club, through ROWLAND GRANT, has been corresponding with Ed for a couple of years. He sent a cheque in November to reimburse Rowland for some items and said to donate what was left over to the club. This amounted to $13. Because Ed has been helpful to GCACE with 8-bit items, we have been sending him copies of XIO3, and it was kind of him to think of us ... The CyberSpy (TED SKRECKY) has taken his role-playing games to a new low by infecting the club with a virus. If you have received a disk from the ST public domain library, you better get VKILL384.LZH from Ted or download it from the Pothole. Ted says it is a mouse inversion virus, so if your mouse goes the wrong way, you've got it. It also can be resident on other disks, because it has to be booted five times before it takes effect. DON'T USE THE VIRUS KILLER ON BOOTABLE GAME DISKS, but you'd better check all the rest of your floppies. If you're concerned or have questions, phone GORD at 475-0857. And if the CyberBorgia offers you something to eat or drink at a general meeting, I'd advise using a poison checker before ingesting ... JOHN PICKEN pulled his annual animal act at the December Executive meeting and drun.., I mean party. Actually, as founding (and only) members of the semi-official Garden City Atari 8-bit Users and Drinking Society, John and I soundly trounced the rest of the executive in alcohol consumed. Mind you, neither of us had to drive, as did other executive members, so I guess we had an advantage. Not to mention that we practise religiously ... Treasurer JOHN TOWLER won the GCACE logo contest, for which he receives a years membership and a copy of EasyDraw. CHRIS SHERWOOD should have printed the logo elsewhere in this issue, if he can take time off from playing silly games on his 486 with CD ROM. I'll forgive him, however, because he still does the newsletter on his Mega 4 ... If you have any news of other traitorous members with IBM's, Phone GORD at 475-0857. That's a new exchange in my phone number, which I never remember when people ask for it. Maybe if a two-by-four was judiciously applied upside my head every time I gave the wrong number, I might remember ...

Tesseract
Computer Systems & Software

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Atari News & Rumors

by Rowland Grant

Atari seems to be on schedule with its Jaguar game machine. The Jaguar was given its official launch (or roll out) at a press conference in New York on November 4th. On hand were Jack, Sam, Leonard and Garry Tramiel as well as most of the Sunnyvale staff. The press were represented by NY Times, Wall Street Journal, CBS, NBC, ABC, and CNN. Those assembled were treated to demonstrations of the Jaguar in a jungle decor complete with dancers dressed in Jaguar costumes. There were ten Jaguar kiosks demonstrating games and in addition there were a few kiosks demonstrating the Lynx game player. Atari has released a number of promotional videos for the Jaguar, some of these will be used to create TV advertisements. All this publicity has generated interest among the larger software houses. Apparently Virgin, Interplay, Microprose, Ubisoft, Gremlins Graphics, Millenium and Accolade have been signed up. Unlike Nintendo, Atari does not place restrictions on developers for its game machines. Toy stores in New York, such as Toys 'R Us, The Wiz, KayBee Toys, will be distributing the Jaguar. However, other vendors elsewhere (such as Toad Computers) may have a few. There are rumours that some Jaguar game machines may be sold in Europe over the holiday season.

Atari is keeping up the momentum. The press conference display has been continued in other locations. For instance it has been reported to have been put on in the Newport Centre Mall in New Jersey. A similar show is scheduled for Tanforan Mall in San Bruno California. Jaguar advertisements have been seen on TV. Jaguar ads are rumoured to be running at movie houses in San Jose. Atari stated that the Jaguar would be shipped on November 15th. The date came and went with no Jaguars for sale. Assuming that Atari had done it again, Atari's stock was sold short. The stock price dipped a bit. However, IBM (Atari's contractor) really did ship Jaguars from its warehouse on the 15th and by November the 20th the Jaguar began to show up in stores. Atari's stock went up and peaked at $12.75. It's estimated that about 15 percent of Atari's stock held by the general public is still in a short position. If Atari does well, this could guarantee a further rise in Atari's stock price. Clouding this picture is the news that there has been some insider selling. Atari did not have its own display at the winter COMDEX in Las Vegas, however the Atari Jaguar was shown in the IBM section and attracted much attention. Atari has had no trouble finding dealers for the Jaguar game player. Apparently all this year's production has been allocated.

According to all reports the Jaguar game consoles have been selling as fast as they come into the stores. This is in spite of the fact that there are only a few Jaguar games available. One game, Cybermorph, is packed with the Jaguar console. And the Crescent Galaxy shoot-em-up has been seen. Some of the other games may turn up before Christmas, but apparently the impressive Alien vs Predator and Chequered Flag 2 still require sound and collision detection code. The availability of more games is crucial at this time. I gather from remarks by Bob Brodie that Atari will be trying to get out at least one new game each month in 1994. The game cartridges have two megabytes capacity, and using data compression techniques, quite an elaborate game can be stored. It looks like there will be lots of games in the future. Accolade will be porting over its five top games to the Jaguar. Activision will be adapting its Return to Zork. Atari itself will publish ID software's Doom: Evil Unleashed.Microprose is promising 3D Gunship 2000, Gremlin will port over Zool 2. More than 35 major software producers have been signed up by Atari. Apparently programmers like the Jaguar. Its enormous capabilities and its flexibility impose few restrictions on programmers.

The initial remarks by those who have been able to buy a Jaguar have been favourable, even enthusiastic. The Cybermorph game has been very well received. Game magazines have been giving the Jaguar and its games very good reviews. Once again Atari seems to be a real force in the video game market. Some problems have been reported with the video adapter box. Apparently the video adapter box has a mechanical switch and a few of these have caused interference. Atari held up shipments and replaced the mechanical switches with solid state video switches. Atari has offered to replace defective video switches immediately. If the purchaser has already bought a new switch box from elsewhere, (Radio Shack sells them), Atari will send the purchaser a choice of a S-video or composite AV cable. Atari has acted with unusual dispatch, a good sign for future customer relations. The introduction in geographically limited markets makes these corrections possible. Still it's a big job, there are over 150 stores stocking the Jaguar in New York alone. Since it looks like the Jaguar will sell out before Christmas, Atari is now getting ready to sell world wide. Sales of the Jaguar should begin throughout the U.S. after January 1994. Sears, Montgomery Ward and Blockbuster Video have been lined up as distributors among many others. As supplies permit, mail order outlets will stock the Jaguar.

Atari expects to have only 50,000 Jaguar units available for sale in 1993. IBM had a Japanese manufacturer make the custom chips for the Jaguar. They were only able to provide 50,000 units of each. So IBM has switched production of Jaguar chips to Motorola. Production of one million units is expected in 1994. The Jaguar contains the two custom chips, called Tom and Jerry, and a small handful of other chip types. Tom contains the RISC circuits, video object processor, the blitter and memory control. Jerry contains the DSP system, the timers and sound generators. These are rather large chips. Atari Games, a separate company owned by Warner, will be using

con't from page 4

these chips in its new arcade machines. Programming for the Jaguar must be done on a computer using some form of cross compiler. Atari has produced, or sponsored a games development system for the Jaguar. This system works best with a TT computer. Atari has a CD ROM player add-on ready to go. It fits neatly on the top of the Jaguar console. However, there is no software in CD ROM format available right now, so Atari has delayed the release of the CD player until later in 1994. While all of the competition are using CD ROM players for their game machines, Atari is not too concerned. Games in cartridges can be accessed a lot faster than games on CD ROM disks. Atari is also producing a MPEG cartridge for the Jaguar that will allow CD based full motion video. This would allow you to watch movies on the Jaguar. Another cartridge will also enable the Jaguar to interface with cable or phone networks. There are rumours that Atari is planning a virtual reality helmet for the Jaguar.

While they concentrate on getting the Jaguar launched, Atari has had to give computer production a lower priority. The Falcon is selling slowly in North America due to its relatively high price and the intense competition in the computer market. Atari has been accused of losing interest in computers. Indeed, there are rumours that Atari computer production has been halted. There has been no real effort to sell the Falcon computer here except in nichemarkets such as the music industry. However there is still a demand for faster and more powerful computers of the ST/TT variety. This has prompted others to begin producing advanced versions of the TT. The latest is the Medusa T-40. It started as a series of do-it-yourself articles in a German magazine. Now the Medusa is available in kit form or ready built. It is essentially a TT with a 68040 running at 66MHz. The German makers of the Eagle, another fast TT clone, are presently negotiating with Atari for a TOS licence. Atari doesn't have too much leeway here. An alternative, the TOS compatible operating system called MAGIX, is available in Germany. Apparently Atari is not upset by these independent TT developments. Bob Glendow, head of Atari in Britain and CEO of Atari Germany, has said that Atari will be interested in granting licences to third party developers of a TT using the latest Motorola 68060 chip. Bob Glendow went on to say that Atari might licence the independent production of the Mega STE.

Atari has consolidated much of its European operations. Distribution of Atari products for Europe has been centralized in Rotterdam. There is little left of the old Atari organization. Management has also been consolidated. And Atari Germany, the most profitable division of Atari, has been reduced to a small office and a network of dealers. Sales are way down. In the first six months of this year, Atari in Germany sold about 6000 Falcon computers. In the past, Atari Germany could sell hundreds of thousands of ST's per year. Throughout Europe about 14,000 Falcons have been sold. It is estimated that about 20,000 Falcon computers have been sold world wide. I suspect that most of these sales have been to ST users. There is no shortage of Falcon computers now.

New products for the Falcon include TT type keyboards, tower cases, rack mounting cases, anything but the boring old ST case. In a decent tower case, the Falcon would look like it was worth the price being asked. Wizztronics is releasing a video capture board which can redraw 30 frames per second. Oregon Research has announced the Videomaster Falcon, a video digitizing cartridge. Videomaster provides full screen stills, or quarter screen with 16-bit sound using input from a composite video source. Videomaster will be available for ST/TT computers also. Oregon Research is also offering Clarity Falcon, a direct to disk digital audio recording package. It provides hardware to connect to an external CD system. Another product, Studio Photo, will retouch any digitzed photo, even in true colour. Studio Photo shows up best on the Falcon but it will run using fewer colours on any ST/TT. Cubase Audio for the Falcon was demonstrated at the Audio Engineers Society's show in New York. It made a very good impression. Technation Digital World has chosen to use the Falcon for its Sonavista sound-to-light typewriter, used in light show production. The continuing stream of hardware and software developments for the Falcon make it a very attractive platform. But does anybody know?

In Europe, Atari did a marketing survey for the Falcon. They found that of the current ST users, 70 to 80 percent planned to upgrade to an Atari Falcon some time. But these are uncertain economic times for most countries. One thinks twice about spending some $2000 (CDN) for a Falcon and a VGA monitor. Slow and steady sales of the Falcon to the current ST users is all that can be expected. When messages were posted that Atari had stopped computer production, this was denied by the people at Sunnyvale. It was said that a shipment of TT computers will be available soon. Apparently there were a number of frustrating production delays. It's rumoured that most of these TT computers will be part of a Jaguar game programmers package. A few may be soldin the general market. There seems to be a demand for these computers. I have heard that second hand TT's are selling for close to new prices. The same goes for the prices of used Stacy laptops.

Stopping Atari computer production comes as no surprise, but it does not mean that Atari is withdrawing from the computer market. From the statements by Atari executives both in the U.S. and abroad, I get the following impression. There are sufficient Falcon computers in stock to last for months or even a year or so at the present rate of sales. The stock of ST computers in Europe is about sold out and will not be replaced. The TT market may be left to third party licencees. This gives Atari a break while it re-establishes itself in the video game market. Just as Atari leaped over most of the competition by producing the most powerful game console for the price, so it will have to do the same with its computer line. If Atari waits for a year or more before it produces the next model of the Falcon computer, that computer will be obsolete. In fact the technology in the Jaguar game console overshadows many of the features of the Falcon computers. Atari has realized this and is planning future alternatives. There are rumours that Atari is planning to use the new PowerPC RISC

chip set being developed by Motorola for IBM and Apple. There are other rumours that IBM is looking at the Jaguar chip set for a video and sound board in its computers. Bob Brodie has said that Atari is looking at incorporating the Jaguar chip set in its future computers. The PowerPC chips can emulate any microprocessor. IBM can use PowerPC to run its PC based operating systems, Apple can use them to power its Macs and Atari could use Power PC in a TOS-GEM based computer. With both IBM and Atari using Tom and Jerry chips for graphics and sound, Atari computers would be seen as comparable to IBM and Apple computers. An article in the Wall Street Journal says that Atari ST computers have a cult following. If Atari can move TOS into the mainstream with the market leaders, Atari computer users could become a mighty cult indeed.

While not too numerous, members of the Atari cult are quite committed. Toad Computers held a weekend Holiday festival at its store location in Maryland. There were software, hardware and publication exhibits, talks and demonstrations. There was free apple cider and cookies for all. A big crowd (more than 700) turned up. Dave Small was present and said that his new version of Spectre (the Mac emulator) version 3.1 should be available soon. But most significant were the sales. In two days, Toad sold all of its large stock of Falcons and a goodly portion of everything else. This pattern has been repeated elsewhere such as in London. At the Le'ST Get Serious show at Alexandra Palace, the latest ST software was in great demand with most items selling out. Atari could build on this enthusiastic user base. It could if it ever gave a serious thought for the users and the dealers. An Atari dealer recently lamented Atari's continuing habit of setting up dealer programs, agreements and services and then cancelling them. With this kind of support, its no wonder that Atari computer dealers are becoming scarce. Locally, I have been told that Wizard Computers, an Atari dealer in Vancouver since 1981, has finally dropped Atari products. The Falcon is pricey for the Canadian market and needs advertising. From the beginning, marketing has been Atari's great weakness. The Tramiel's have made things worse by giving advertising and dealer relationships a low priority. They seem to have made a big splash with the introduction of the Jaguar. We now await the marketing follow-up. It will have to be good, or the Jaguar will lose out to inferior products that are backed by better marketing. "Superior marketing beats superior design every time." We know that, don't we. We've seen it happen before.

Atari-8 Affairs

by Rowland Grant

While Atari ST computers have been said to have a cult following, where does that leave the 8-bit Atari computer users? The word occult comes to mind. But occult really means hidden or covered up, and implies something that its adherents are trying to keep hidden. That is not typical of 8-bit users. There has been a lot of effort by groups and individuals to keep the 8-bit Atari computers in the open. One of those groups is the Tyne and Wear Atari Users Group (TWAUG), P.O. Box No.8, Wallsend, Tyne & Wear, NE28 6DQ England. Recently our club received a copy of the TWAUG newsletter. This is a bimonthly magazine of 32 pages. A disk of software goes with it. The TWAUG newsletter issue six which we received has a small 8x6 format. The pages have been prepared using Textpro and DaisyDot 3 and photo-reduced to the format size. Issue six contains thirteen articles plus an editorial. Some of the articles are new material, others are reprints. Our own John Picken is represented by a reprint of his article "Your Other Computer" (about printers). There are some advertisements too. One of the more interesting is the "Yorkie" 256K memory upgrade that plugs into the expansion bus of XL computers (costs 50 pounds). With its bright orange cover, content and layout, the TWAUG newsletter reminds me of the Club Cenacle newsletter. Like Club Cenacle, TWAUG also sells public domain and other software. Issue six was turned out by John Matthewson, David Ewens, and Max Gerum with the help of a few contributors. Their energy and accomplishments are really impressive.

And it doesn't stop there. David Ewens has written to inform us of a new book, written by one of TWAUG's members, that they hope to publish in 1994. The book is about memory mapping for XL/XE computers. This should be welcome, since "Mapping the Atari" has been out of print for years. Extracts of the book are being sent out to users groups and publishers for comments and to assess the market for it. David also kindly wrote an account of the All Micro Show held in Stafford England. Seven members of TWAUG set up a booth at the show and more than met their expenses in sales as well as signing up a number of new subscribers. At the show there were 14 exhibits devoted entirely to 8-bit Atari computers. One of these was Micro Discount, the main distributor in Britain for Atari 8-bit software and hardware. Micro Discount had 14 new software titles on display. Another vendor, Dean Garraghty's Software, has imported recent 8-bit software titles from the continent, among them the is the QUICK language which is popular in Germany. I notice that Robert Paden has given up producing the Irish Atari User newsletter (8-bit) because of lack of support. However Robert will be putting out a disk newsletter called Phoenix which will be distributed

through TWAUG and Page6 publishing. If Phoenix is successful, Robert Paden will distribute the disk magazine directly.

Toad Computers, 570-F Ritchie Highway, Severna Park, MD 21146, is well known as a major supplier of ST software and hardware. Ted Skrecky sent off for a catalogue. He received the 1992 summer issue. I presume that they haven't got around to updating their catalogue. However, the catalogue devoted a page to Atari 8-bit software and hardware. And quite a page it is. Apparently Toad Computers has been recycling Atari 8-bit materials for years. They seem to have almost any hardware item in varying quantities, including such things as MIO boards, the ATR8000 and just about every major brand of 8-bit disk drive. Their 8-bit software holdings are immense, and include a number of rare items.For instance they have the Monkeywrench cartridge for the right hand slot of the Atari 800, one of the few cartridges using that slot.

While a satisfactory range of new hardware upgrades and add-ons are available in North America, I notice (in Atari Classics) that the Atari 8-bit is also well supported in Germany. Klaus Peters is offering a 1 MB expansion that uses only two 4-megabit DRAM chips. He also offers a 512K ROM disk that uses EPROMS of your favorite software. Of course you have to burn your own EPROMs. There is an operating system replacement called Bibomon that packs 25K of code into the 16K available. In addition to a modified OS the Bibomon also provides a machine language monitor, an assembler, a sector editor and some DOS functions. A double density drive is also available that plugs directly into the serial port. A XL loaded with Klause Peter's hardware would need a disk drive only occasionally. Another operating system replacement called SPOS supports a RAM disk and allows you to boot from RAM. SPOS can be controlled through a menu that comes up with a special key press. Sounds something like a MIO board without the board. The HDI drive, a 3.5 inch drive with a 1.44 MB capacity that plugs into an 8-bit serial port, is also available in Germany.

I was under the impression that Ol' Hackers Atari User Group was producing the disks for Atari Classics. Apparently Ol' Hackers is in charge of packing and mailing the disks. This a major production in itself. They have a technique of fixing the disk in its envelope with a piece of tape to prevent the disk from shifting in transit. They use a paper envelope, but I've never received a damaged disk from them yet. The actual disk production is done by others elsewhere. Another item, the Gemulator, a hardware and software combination, makes a fast PC computer emulate a ST. In a recent ad for the Gemulator, Atari 800 emulation was listed as one of the features. This could be done by using the X-Former software which causes a ST to emulate an Atari XE. Emulation within emulation! Start out with a 50 Mhz 80486 system, emulate a 8 Mhz ST which then emulates a 1.7Mhz XE. Darek Mihoka, the creator of Gemulator and Xformer, has gone one step further and has created the PC X-former. This will enable a PC to emulate an XE directly, and a very fast XE at that. I've used the X-Former on the ST and it does work, sort of, but it leaves a lot to be desired. Me, I'll take a plain vanilla (real) Atari 800.

However I have been using the X-former quite a bit just lately. Ted Skrecky has been roaming the communication superhighways and has brought in a lot of 8-bit software files. Since he is using his ST to do the roaming, the 8-bit files end up on a ST disk. The X-former is able to transfer these files to a 8-bit drive through a special cable that plugs into the ST's printer port. These files are in some compressed form and must be uncompressed before we really know what we have. Anything useful or interesting is collected on its own floppy disk, labelled and placed in the 8-bit library. Or at least it will be. I have a great pile of disks full of arced files that I haven't been able to get to yet. And Ted keeps bringing more to be transferred. If you are impatient to get at this stuff, Ted does post most of it on the Pothole BBS, so you can download and unarc it yourself.

Another source of 8-bit software is donations. Lately we have added a number of Bellcom theme disks. The latest batch is from Gordon Hooper and myself. The following disks have been donated. DISK INDEXES, here are three programs for cataloging and indexing your disks. VIDEOFILE contains two database programs for video and audio tape file collections, complete with label creators.STARLORDS is a space strategy game for one or two players. DR. WHO, this is a game and some Dr. Who trivia (got it for Ted). SUPERDOS 5.0 is a fine DOS for most purposes, compatible with DOS 2.5 and handles all the XF551 formats. DIGITAL EDITOR 3.6 is an upgrade of an earlier desktop publishing program, it mixes drawings and text. DRAW-7 is a very powerful drawing program for the 130XE. MESA FORTH is a Fig Forth computing language that uses and saves to DOS files (unlike most Forth versions that have their own unique operating system), there are two disks. DISKUTIL is an integrated collection of unusual and useful disk utilities. ADVANCED PROGRAMMING UTILITIES, assembler macros and other interesting goodies. ASSEMBLY LANGUAGE TUTORIAL is a collection of light-hearted lessons by Chris Crawford. SYSTEMS REFERENCE MANUAL is a complete rewrite of the Atari technical manuals in twenty chapters (on two disks). ACTION! UTILITIES, there are two disks of programs and examples using the Action! computing language; includes a number of terminal programs. ACTION! GAMES, you can run these games without an Action! cartridge, source code is provided for Action! hackers. There is another load of Bellcom disks in the pipeline. Oh yes, we received yet another catalogue supplement from Bellcom. Don Bell has extended the closeout deadline to January 31st. He has also added 46 new titles. It's obvious that Don doesn't want to leave the Atari 8-bit market, and he will hang on as long as he can. It's just that the 8-bit market is getting too small for a full time business. Don runs a high quality PD software service, he is continually upgrading his titles. Upgrades or replacements are free. I received a bunch of disks from Don early in December. One had been copied incorrectly (I didn't notice it). A week later a corrected disk arrived in the mail. We're all going to miss Bellcom.

Club Meetings

by: Rowland Grant

Unfortunately I missed the November general meeting. John Picken did give a talk and demonstration about disk structure and storage as planned. I was supposed to follow John's presentation and demonstrate ST disk structure. I did prepare some material and learned a lot about computer disks in the process. I hope to do an article on this for a future issue of XIO3. There is no meeting in December since the third Thursday is right in the holiday season. There is an executive meeting however, with some festivities following. Gordon Hooper kindly hosted the December executive meeting again this year and provided most of the refreshments.

Now that PSAN is gone the Seattle Puget Sound Atari Computer Enthusiasts (SPACE) has issued its own newsletter called "Messages from S*P*A*C*E". It is in leaflet form and naturally uses a very familiar PSAN-like layout. John Strand is the general coordinator (publisher?) of this newsletter. There are a few articles by SPACE members along with club news and information. Any pages left over are filled with selected downloaded material. I get the impression that SPACE has suffered a decline in membership in recent years. However they seem to have retained a sufficient number of active and devoted members, so SPACE is very much alive.

Bob Lussier in Vancouver has been one of our most valuable sources of public domain ST software. For a time we lost contact with Bob. Then we found out that Bob had been crippled by a stroke. Bob had some surgery recently and now he is in hospital again. We wish him well and hope that he will be back at the console of his Atari soon.

We received a Christmas card from Ed Hall in Yellow Knife. Ed also sent a copy of his annual family newsletter which he created using a new public domain 8bit program called Page Editor. We will be getting this program for our 8-bit library soon. I understand that it is a "what you see is what you get" type of desktop publisher. Also Ed has generously contributed $13 to our club as a result of a rather complicated deal (that I needn't discuss here). I guess that gives Ed a half membership.
We are still looking at ways to get Darek Mihoka to demonstrate his Gemulator in Victoria. Darek will come over from the Seattle area if we can be sure of an audience of at least thirty. One possibility is to give a demonstration as part of a Big Blue and Cousins meeting. You never know, some BBC members might be interested in purchasing the Gemulator. They would certainly be interested in Darek (he works for Microsoft). Also emulation is a hot topic these days what with the PowerPC chip and all.

John Picken has finally chased the bugs out of his double-XL and RAM disk programs. John is not yet ready to distribute these programs to the public domain, but interested members can get a copy from John. John is considering publishing articles on the development and nature of his programs prior to releasing the software. We did send some earlier software of John's to TWAUG along with a disk of Doug Skrecky's programs. No reason why programs by members of Garden City ACE shouldn't be sent around the world.

The judges of the Club logo contest assembled at the December executive meeting to determine the winner. That was easy because John Towler was the only entrant. However John Towler had submitted three designs. And there was some difference of opinion on which was the best. Anyway, John will receive the grand prize and a free membership renewal at the Annual General Meeting in January.

Mysteries of the ST's AUTO Folder

By: John Towler

Have you ever scratched your head (or started tearing your hair out) wondering why the programs in your AUTO folder work or don't work? I hope this article will answer some of your questions.

What is an AUTO folder, anyway? It is a folder located on the floppy disk or hard drive you boot from, which must be named AUTO. Programs in the folder automatically run as the computer boots. You can't simply dump programs into the AUTO folder and expect no problems, however.

The order in which programs in the AUTO folder execute are a common source of trouble. They don't run in alphabetical order or even necessarily in the order in which you put them in the folder. Instead, they run in the physical order that they occur on the disk, called NO SORT order. This can differ from the order in which programs are placed into the folder if you remove a program and, before rebooting, add another. Here the added program would take the slot of the program you removed. You can change the order of the programs in the folder two ways: the hard one and the easy one. The hard method is to take all the programs out, and then put them back, in the order you wish them to run. In other words, put the first program

to run into the folder, then the second and third, continuing until you add the last program to be run. The easy way is to use one of several utility programs which allow you to change the order by simply dragging programs to the position you want. Two programs on the Pothole BBS will do this. AUTOFOLD allow you to choose the drive on which the AUTO folder is located and then shows you the programs in the folder in NO SORT order. You left click and hold on a program name, then drag it to its new position in the order. When you are satisfied with the order, click on the RESORT button. AUTOSORT resembles AUTOFOLD, but shows all files in the folder, not just programs (both programs have a limit of 20 filenames, so if you have many AUTO programs you might prefer AUTOFOLD). Both these utilities work by creating a temporary folder, moving the programs there and then putting them back into the AUTO folder in the new order, so ensure you have enough room on your disk for the temporary folder. Users of NeoDesk 3, MaxiFile III, or STs with TOS 2.01 or later have it even better, as these programs can quickly change the order without moving files in and out of the folder.

But why should you even care which order programs run in? Some programs need to run near the beginning or end of the folder to give you maximum benefit or perhaps even to work at all. Others won't work or might cause problems, to the point your computer bombs, if they follow certain other programs. The documents accompanying a program should tell you if a program must run at a certain point to do its job, or if it must precede or follow other commonly used AUTO folder programs. Thousands of AUTO programs are available though, so documents can't list all possible conflicts - meaning you might have to experiment to get two combatants to co-exist.

Besides the running order, other problems can occur with the AUTO folder. For instance, some programs simply cannot get along, in which case you can only decide which one to do without, or find an alternative which does work. Many AUTO programs have compatibility problems if they make illegal calls to the system, especially when used on versions of TOS released after the program was written. Two programs doing the same thing may also cause trouble. Are you trying to run two cache programs? One will do the job, and even if the second one runs, it will just degrade your computer's performance and use too much memory. Using two mouse accelerators is another example of redundancy. Your mouse will probably move so fast you can hardly see it, let alone control it.

So what can and should you put in your AUTO folder? Not just any program will work. If a program should run from there, it will have been written expressly as an AUTO program and its documents will say so. No program which uses GEM (windows, menus, etc.) can be placed in the folder, because the ST doesn't load GEM until the AUTO folder has finished running. You can autorun a GEM program, however. On STs with TOS 1.0 or 1.02, use HEADSTART or STARTGEM, both of which are in the GCACE library. You place either one last in the AUTO folder, along with a small text file containing the name and location of the GEM program to run. With TOS 1.04 or later, simply click once on the name of the program to run, then pull down the OPTIONS menu and select Install Application. Beside the selection Boot Status you'll see a button named AUTO; just select it, and save your desktop before shutting off the computer. Of course you can only choose one program to autorun.

Thousands of programs will run from the AUTO folder, nearly all of which alter the behaviour of your system in some way. Some programs perform their function, then terminate, leaving nothing in the computer's memory, but most remain active to work in the background. An important group of AUTO programs are "patches", which fix bugs in the operating system when put in the AUTO folder. Released by Atari Corp., these programs replace pieces of code with patches of new code. These changes aren't permanent, so the programs must run every time you boot or reboot the computer. The ones you should use depends on the version of TOS in your computer.

Soon after the ST was released a problem called the "40 folder bug" appeared. If the computer used more than 40 folders, an area of memory called the OS Pool ran out of room, and the computer crashed. This particularly caused problems with hard drives, which can contain many folders, and could cause damage to the disk directory. Atari solved the problem with a patch called FOLDRXXX.PRG, which extends the OS Pool. You decide how many extra folders you want and rename the patch, replacing "XXX" with that number. For instance FOLDR100.PRG would give you room for 100 extra folder names, for a total of 140 (40 + 100). The system code was rewritten in TOS 1.04, so the catastrophic aspects of the 40 folder bug disappeared, but the OS Pool limit still exists, and exceeding 40 folders accessed will get you a warning to use FOLDRXXX.PRG, followed by the news that you will have to reboot. If you're already using FOLDRXXX.PRG and get this warning, you should increase the value of XXX. All versions of TOS need this patch and it should be among the first programs in the AUTO folder, but some hard drive software, such as ICD's, will do the same job, allowing you to omit FOLDRXXX.PRG.

Another program specifically for TOS 1.0 and 1.02 doesn't come from Atari. FATSPEED speeds up the search for free clusters in file write operations, and replaces the sector buffer copy routines with faster ones. In English that means it speeds up the writing of files to disk. It also fixes a GEMDOS bug having to do with redirection of some system calls. FATSPEED should follow FOLDRXXX.PRG in your AUTO folder. If you have TOS 1.04 or later you won't need this patch.

TOS 1.04 needs a fix for two bugs. One involves high speed modems and serial printers, the other involves loading resource files (.RSC extenders) of programs. Simply add TOS14FIX.PRG to you AUTO folder and that's it. Position in the folder doesn't appear to be important. Atari has released an update to this patch program, called TOS14FX2.PRG, which is the latest official word on this subject, apparently.

Early STEs, those with TOS 1.06, couldn't boot into medium resolution. STE–FIX.PRG fixes that. Again, position doesn't appear to matter. If you have an STE with TOS 1.62, you don't need this one.

Next begins the saga of POOLFIX. When Atari squashed the 40 folder bug another, they created another problem, in which TOS improperly manages the OS Pool. Luckily, this problem is rare. Atari released the first attempt to fix it, called POOLFIX3.PRG. This program must come first in your AUTO folder, or if you have a hard drive booter or desktop manager in the folder, it can follow that. This patch (like POOLFIX1 & 2, which never saw the light of day) wasn't quite perfect, so a programmer in Germany wrote POOLFIX4.PRG, which does a better job and can be anywhere in your folder. Finally, last year POOLFX92.PRG (92?!) appeared. John Eidsvoog, who probably know as much about the inner workings of STs as anyone, warns against using this version however, which he says is buggy.

All versions of TOS handle hardware flow control, which is important for high speed modems (9600 baud or faster), improperly. Several fixes are available. TURBOCTS treats the symptom, but doesn't really cure the problem. Morgan Stewart, who runs the Capoiera Circle BBS likes HS–FIX.PRG. Another program called Serial Fix has had two versions. SERFIX.PRG didn't completely solve the problem, according to its author, so he released SERFX20.PRG. This one not only gets the hardware handshaking bug, but also replaces TOS14FIX and Serial Port Fix, the next program on the list. SERFX20.PRG comes with a CPX for Atari's Extensible Control Panel which will lock the hardware flow control on, as some terminal programs like the original Flash would turn it off again when run. You only need one of these patches, which you can apparently put anywhere in you AUTO folder.

If you have a Mega STE with TOS 2.05 or a TT with TOS 3.05 you'll need SERPTCH2.PRG, from Atari, which fixes a bug in the handling of the serial ports.

Lastly, TOS 1.04 (and possibly later TOS versions as well) has an "undocumented feature" whereby single-clicking on a window slide bar can cause rapid scrolling, as if you are holding down the mouse button. SCRLFIX, a desk accessory in the GCACE library, will fix this bug, as will Button Fix from Codehead Technologies. Multi Desk Deluxe from Codehead has Button Fix built-in.

You may wonder how to tell which version of TOS you have. If you have the Extensible Control Panel (it's in the GCACE library, as well as on the Pothole BBS, as XCONTROL), open the General Setup CPX and click on Status. Otherwise, you can determine the version by clicking on DESKTOP INFO at the desktop and looking at the date. If the latest copyright date is 1985, you have TOS 1.0. A Mega ST showing a latest date of 1987 has 1.02, also called Mega TOS. A date of 1989 indicates 1.04, also known as Rainbow TOS. STEs will have either TOS 1.06 or 1.62; you'll have to use the X Control Panel to determine which one you have. Mega STEs and TTs will have versions of 2.0+ and 3.0+ respectively; again, use the X Control Panel, or a system status utility to determine the exact number. The GCACE library and the Pothole BBS each have status utilities.

If you have TOS 1.0 or 1.02, you should really consider upgrading to 1.04. It's a matter of replacing the TOS chip set in your ST, a service that Steve Lemmen offers. You'll not only get gentler handling of the folder limit but these benefits as well:

- Improved file handling - File moving as well as copying, by holding the Control during a copy operation, and options to "copy, skip or cancel" when filename conflicts arise during copying groups of files.
- The ability to rename folders. - An improved file selector, which allows wild cards in the directory line, and has drive selector buttons. No more manual typing of the pathname you want on the directory line.
- Faster disk drive operations for both floppies and hard drives.
- Program fastloading and autostarting.
- The ability to warm and cold reboot using keyboard commands.

You can also upgrade an ST to TOS 2.06. If you have a 1040 STE, you only have to replace the TOS chips, but earlier machines require an adapter: the TOS Extension Card (TEC) from Codehead Technologies; the Compatibility Plus from Wizztronics; or TAB from Newell Industries, all of which come with the ROM chips. TOS 2.06 mainly improved the ST's desktop, including:

- Customized icons for programs and files, which you can place right on the desktop.
- Keyboard equivalents for most functions.
- New functions including file searching and launching programs using function keys.
- A limited macro processor.

You can get the benefits of TOS 2.06 less expensively by using a software desktop replacement such as Teradesk, KAOS or Gemini, from the GCACE library, or NeoDesk 3 from Gribnif Software. A completely different approach which does away with the "traditional" desktop of the ST is the combination of MaxiFile III, a file manager, and Hotwire, a program launcher, both from Codehead Technologies (sold separately or together). All of these shell programs consume some of your available memory, however. They don't give you TOS 2.06, either, so continue to use the patch programs your TOS needs, not those required for TOS 2.06

Thanks to Mark Jansen's article in the March/April issue of Atari Explorer for much valuable information.

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Steven Lemmen 595-7811

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- systems come with 10 PD disks,case,mouse,joystick

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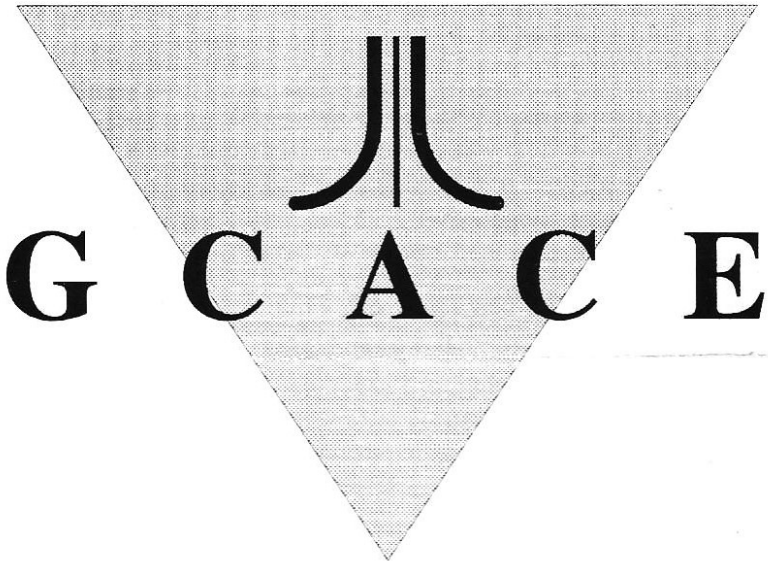

John Towler - Logo # 3